PLACENTATION IN BIGNONIACEAE AS ILLUSTRATED BY *CATALPA*, *MILLINGTONIA*, *KIGELIA*, AND *ECCREMOCARPUS*

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The Bignoniaceae has a bicarpellary superior ovary with many ovules. Placentation has been reported as parietal in a unilocular ovary and as two axiles in each locule of a bilocular ovary.

The ovaries in *Catalpa*, *Millingtonia*, and *Kigelia* are bilocular. The placentation in *Catalpa* is subaxile (figure 1) and that in *Millingtonia* and *Kigelia* is subparietal (figure 2). *Catalpa* has a swollen sterile tissue in the center of the ovary and on both sides of it bifid parietal placenta occur in the antero-posterior positions. The arrangement of the ovules in *Millingtonia* and *Kigelia* is almost the same but the central tissue is very thin. The central, thin sterile structure in these two genera is comparable to the structure of the replum found in the Crucifer ovary (Brassicaceae) (figure 4). The ovary of *Eccremocarpus* is unilocular with two bifid parietal placenta (figure 3).

From the evidence cited above, the parietal placentation (as in *Eccremocarpus*) in the Bignoniaceae could be derived from subaxile placentation (as in *Catalpa*) through subparietal placentation by the dissolution of the central tissue found in *Millingtonia* and *Kigelia*.

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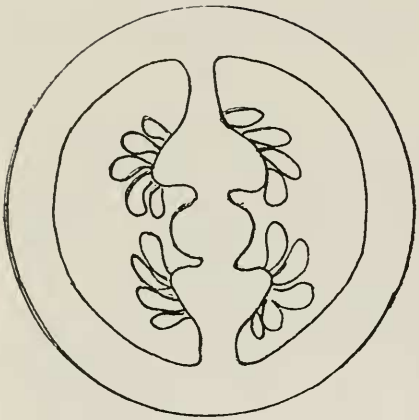

Figure 1

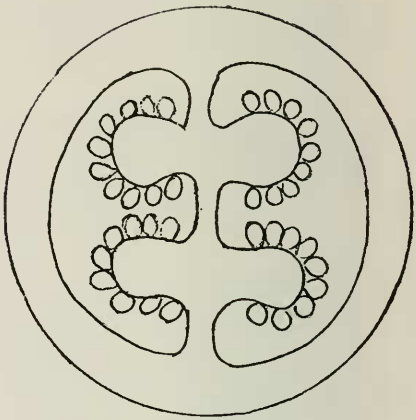

Figure 2

Figure 3

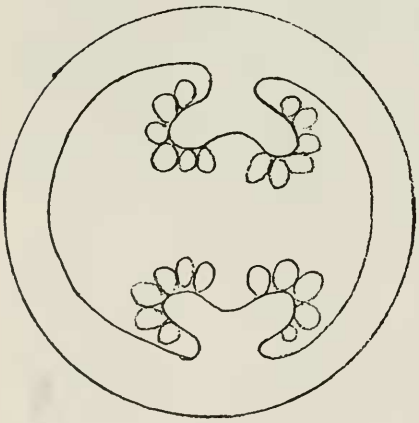

Figure 4